## ISSUE SLIP STAPLE AREA-(for additional cross references)

| POSITION                  | INITIALS | ID NO.  | DATE     |
|---------------------------|----------|---------|----------|
| FEE DETERMINATION         | 1/1      | 7091    | 98       |
| O.I.P.E. CLASSIFIER       | 0 0      | (21)    | 1119190) |
| FORMALITY REVIEW          | 1/11/2   | 10001   | 10-24-01 |
| RESPONSE FORMALITY REVIEW | 1411)    | 17/2016 | 13-5-010 |

## **INDEX OF CLAIMS**

| ~ | Rejected                   | N.  | Non-elected  |
|---|----------------------------|-----|--------------|
| = | Allowed                    | Ι.  | Interference |
| _ | (Through numeral) Canceled | Α.  | Appeal       |
| ÷ | Restricted                 | 0 . | Objected     |

|          |     |          |  |                   |          | ÷                                      |              |                |                |              |              | erai)<br>                                    |                   |               |              |              |              |              | А<br>0       |            |              |              |          |   |           | At         | ope<br>bjec | ai<br>etec | 1            |
|----------|-----|----------|--|-------------------|----------|--|--------------|----------------|----------------|--------------|--------------|--|-------------------|---------------|--------------|--------------|--------------|--------------|--------------|------------|--------------|--------------|----------|---|-----------|------------|-------------|------------|--------------|
| CI       | aim | 1        |  |                   |          | Da                                     | te           |                |                |              |              | ] [C   | aim               |               | ,            | ,            | ,            | Da           | te           |            | _            | ,            |          |   | Cla       | ıim        |             |            | _            |
| Final    |     |          | RPC I.A  | 8                 |          |  |              |                |                |              |              | Final  |                   |               |              |              |              |              |              |            |              |              |          |   | Final     | Original   |             |            |              |
| 1-       |     | ¥        | 1  | 10                | -        | <u> </u>                               | -            | ╀              | <del> </del> - | L            | <u> </u>     | <b>↓                                    </b> | 51                | <u> </u>      | _            | ļ            | <u> </u>     | <u> </u>     | _            | <u> </u> _ | <u> </u>     |              |          |   | <u> </u>  | 101        | ļ           |            | L            |
| 1        | 7   | P        | H  | $^{\rm H}$        | ╁        | ╁                                      | +-           | ┼-             |                | ├            | ┼            | ┨ ┣━   | 52<br>53          | -             | -            | ├            | ├            | $\vdash$     | ├-           |            | ├            | _            | _        |   |           | 102<br>103 | -           | <u> </u>   | ╀            |
|          | 1   |          | H  | ₩                 | ╁        | ╁                                      | ╁            | ╁              | ┼              | -            | ├            | ┨  | 54                | ├             | -            | ┝            | <del> </del> |              | $\vdash$     | Ͱ          | ⊢            | -            | _        |   | ⊢         | 104        | <b> </b> -  | -          | ┝            |
| \$       | 5   |          |  | $\dagger\dagger$  | †        | 1-                                     | †            | $\vdash$       | ╅╌             | <u> </u>     | <del> </del> | 1  -   | 55                | 1             | ╁            | ┢            | 1-           | ╁╌           | <del> </del> |            | ╁╌           | -            | -        |   | H         | 105        | $\vdash$    |            | ╁            |
| 4        | 6   | 1        |  | 11                | 1        | 1                                      |              | 1              | 1              | -            |              | 1  | 56                | 1             | 1            | <del> </del> | 1-           | $\vdash$     | ऻऻ           | 1          | 1            | -            |          |   | $\vdash$  | 106        | _           | Г          | t            |
| 7        | 7   |          | $\prod$  |                   |          |  | L            |                |                |              |              |  | 57                |               |              |              |              | İ            |              | İ.,        |              |              |          | ĺ |           | 107        |             | _          | r            |
| 3        | 8   |          | 11   | Ц                 | _        | <u> </u>                               | _            |                | $oxed{oxed}$   | L            |              | }  | 58                | L             |              |              |              |              |              |            |              |              |          |   |           | 108        |             |            | Γ            |
| 9        | 9   |          | Ц.   | 44                | ╀        | ╙                                      | ↓_           | ↓_             | <u> </u>       | <u> </u>     | L            | ↓  _   | 59                | _             | L            | L            | <u> </u>     | ļ            | _            |            | L            |              | L        |   |           | 109        | _           | _          | L            |
| 10       | 10  |          | #  | #                 | ╁-       | ــــــــــــــــــــــــــــــــــــــ | ┞            | ┡              | ↓_             | <u> </u>     |              | ⇃├   | 60                | <u> </u>      | ₩            | L            | <u> </u>     | <b>!</b>     | <u> </u>     |            | <u> </u>     |              | _        |   | <u> _</u> | 110        | <u> </u>    | <u> </u>   | L            |
| 17       | 12  | -1-6     | H  | ₩                 | +        | ┼                                      | +            | ╀              | $\vdash$       | ├            | <del> </del> | <b> </b>                                     | 61<br>62          |               |              | <del> </del> | <del> </del> | <del> </del> | <del> </del> |            | <del> </del> | <u> </u>     | ļ        |   |           | 111        | H           | <u> </u>   | Ł            |
| 12       | 13  |          | ╁┼   | ╁┼                | ╁        | ┼-                                     | ┼            | -              | -              |              | <del> </del> | <b>1</b>                                     | 63                |               | -            | -            | ├-           |              |              | -          | $\vdash$     | _            |          |   | <u> </u>  | 112<br>113 | $\vdash$    | $\vdash$   | ╀            |
| 14       | 14  | 1        | ††   | #                 | ╁        | ╁                                      | 1            | +-             | 1-             | -            | 1-           | 1  | 64                | <del> -</del> | <del> </del> | $\vdash$     | $\vdash$     | $\vdash$     | -            | $\vdash$   | $\vdash$     | $\vdash$     | -        |   | -         | 114        | $\vdash$    | $\vdash$   | $\vdash$     |
| 13.4     | (1  | #        | #  | $\dagger \dagger$ | ✝        | 1-                                     | 1            | $\vdash$       | $t^-$          | $\vdash$     | $t^-$        | 1  | 65                | T             | 1            | T            | <del> </del> | $\vdash$     | T            | $\vdash$   | _            | H            | Н        |   | -         | 115        |             | Н          | H            |
| K        | 16  |          | IJ   | 4                 | 1        |  |              |                | Ι              |              |              |  | 66                |               |              |              |              |              |              |            |              |              |          |   |           | 116        |             | Γ          | r            |
|          | 17  |          |  |                   |          |  |              |                |                |              |              |  | 67                |               |              |              |              |              |              |            |              |              |          |   |           | 117        |             |            |              |
| L        | 18  | +-       | L  | <u> </u>          | Ļ        |  | _            | ļ              | ╙              | _            | <u> </u>     | _  | 68                | _             | _            | <u> </u>     |              | <u> _</u>    |              |            |              |              |          |   |           | 118        |             |            |              |
| $\vdash$ | 19  | +        | ļ.,  | $\perp$           | 1        | ↓_                                     | <u> </u>     | _              | ļ              | _            | <b> </b> _   | ↓  | 69                |               | <u> </u>     | <u> </u>     | <u> </u> _   | <u>L</u>     | <u> </u>     | _          | L            |              |          |   | _         | 119        |             | _          | L            |
| ļ        | 20  | ╅—       | L  | _                 | _        | 1_                                     | ļ_           | <u> </u>       | ļ              | <u> </u>     | <u> </u>     | <u> </u> _                                   | 70                | _             | _            |              | <u> </u>     | <u> </u>     |              |            |              | ļ            | _        |   | ļ         | 120        |             |            | L            |
| -        | 21  | -        | -  | ╀-                | ╀        | <del> </del>                           | ļ            | <del> </del> — | <del> </del> _ | ļ            | ļ            | -  | 71                | -             | <del> </del> | ļ            | <del> </del> | <del> </del> |              | <b> </b>   | _            | _            |          |   | <b>-</b>  | 121        |             |            | L            |
|          | 22  |          | ╁  | ╂                 | ╁        | ┼                                      | ├            | <del> </del>   | <del> </del>   |              | <del> </del> | {  | 72<br>73          | -             |              |              | ┨            | <b>├</b>     |              | <b> </b>   | -            |              |          |   |           | 122<br>123 | ıH          |            | -            |
|          | 24  |          | <del> </del>                                     | ╁╌                | -        | ╢                                      |              |                | ┼              | <del> </del> | ╁            | <del> </del>                                 | 74                | -             | <del> </del> |              |              | <del> </del> |              |            |              | <del> </del> |          |   | Ė         | 124        | -           |            | -            |
| -        | 25  | <b>-</b> | 1-   | -                 | ┼        | ╁                                      | <u> </u>     | $\vdash$       | ╁─             | ╁            | ╁            | 1 -  | 75                | <del> </del>  | ╁            | ┢            | ╁            | <del> </del> | -            | _          |              | -            | -        |   |           | 125        | -           | _          | ├            |
|          | 26  | ┥        | 1-   |                   | 1        | 1                                      |              | 1              | 1-             |              | <b>†</b> -   | 1  | 76                | _             | Т            |              | 1            | t            | _            |            |              |              |          |   |           | 126        |             |            | H            |
|          | 27  |          |  |                   |          |  |              |                |                |              |              |  | 77                |               |              |              |              |              |              |            |              |              |          |   |           | 127        |             | _          | -            |
|          | 28  |          | _  | ļ_                | _        | <u> </u>                               | <u> </u>     | <u> </u>       |                |              | <u> </u>     |  | 78                |               | _            | L            |              |              | _            |            |              |              |          |   |           | 128        |             |            |              |
| $\perp$  | 29  | -        | <u> _</u>  | <del> </del> _    | <u> </u> |  | <b> </b>     | ļ              | ļ              | _            | ļ_           |  | 79                |               | l_           |              | <b> </b>     | <b> </b>     | <u> </u>     | _          |              | ļ            |          |   |           | 129        | Ш           | L          | L            |
| -        | 31  |          | <del> </del> —                                   | ļ                 | ļ        | <b> </b> -                             | <del> </del> | ļ              | <b> </b>       |              | ļ            | _  | <u>80</u><br>  81 | <u> </u>      | <u> </u> _   |              | ļ            | <u> </u> _   | <b> </b> _   |            | _            | _            | ļ        |   |           | 130        |             | <u> </u>   | L            |
| -        | 32  |          | <del> </del>                                     | ┤—                |          | ļ                                      | <del> </del> | <del> </del>   | <del> </del>   |              |              | <b>∤</b>                                     | 82                |               |              |              | <del> </del> | <del> </del> | <b> </b> -   | ├—         |              |              |          |   | -         | 131<br>132 | $\vdash$    | ļ          | -            |
|          | 33  | _        | -  | ┼                 | ╁        | -                                      | ├            | ├              | ├              | -            | ╢            | <del> </del>                                 | 83                | -             |              |              | ├            | <del> </del> | -            |            | -            |              |          |   |           | 133        |             |            | ╂−           |
| $\vdash$ | 34  | -1       | 1  | ╁                 | 1-       | ╁                                      | †-           | 1-             | -              | -            | -            | 1  | 84                |               | <del> </del> | -            | 1-           | -            |              |            |              | -            |          |   |           | 134        |             |            | <del> </del> |
|          | 35  |          |  | 1                 | 1        | $I^-$                                  |              | 1-             | 1              |              | 1            | 1  | 85                | 1             | _            | -            | 1            |              | <del> </del> | -          | -            |              | -        |   |           | 135        |             |            | -            |
|          | 36  |          |  |                   |          |  |              |                |                |              |              |  | 86                |               |              |              |              |              |              |            |              | _            |          |   |           | 136        |             |            |              |
|          | 37  |          | L  | _                 |          | L                                      | L            | _              |                |              | _            |  | 87                | _             |              | _            | L            |              |              |            |              |              |          |   |           | 137        |             |            |              |
| <u></u>  | 38  | -l       |  | ļ                 |          |  | _            | <b> </b>       | <b> </b> _     | <u> </u> _   | <u> _</u>    | ↓  | 88                |               |              | _            | <u> </u> _   | L.,          | _            | $\vdash$   | _            | Щ            | L.,      |   |           | 138        |             | _          | L            |
| $\vdash$ | 39  | +        | -  | -                 |          | ⊢                                      | ⊢            | ⊢              | _              | -            | -            | <b>∤</b>                                     | 89                | -             |              | -            | ₩            | $\vdash$     | <u> </u> -   | -          | $\vdash$     | <u> </u>     |          |   |           | 139        | $\dashv$    | <b> </b> - | -            |
|          | 40  |          | ├-   | -                 | -        |  |              |                |                |              |              | -  | 90                |               |              | -            |              | -            | ļ            |            |              | -            |          |   |           | 140        | _           |            | -            |
| $\vdash$ | 41  | -        |  | -                 | -        | <del> </del>                           | <u> </u>     | <del> </del>   | -              |              | -            | <b> </b>                                     | 91                |               | <del> </del> |              | -            |              | <del> </del> | -          |              | <u> </u>     |          |   |           | 141<br>142 | $\dashv$    |            | -            |
| <u> </u> | 43  |          | -  |                   | ┼        | ├                                      | <del> </del> | <u> </u>       | -              |              | -            | -  | 93                |               | $\vdash$     | $\vdash$     |              |              |              |            | -            | -            | -        |   |           | 143        | $\dashv$    | -          | -            |
| 1        | 44  | _        | $\vdash$   | ┼                 | -        |  |              | <del> -</del>  | $\vdash$       | $\vdash$     | $\vdash$     | <b>┤</b> ├─                                  | 94                | <del> -</del> |              | _            | $\vdash$     |              |              |            | $\vdash$     | -            |          |   | $\mid$    | 144        | -           |            | -            |
|          | 45  | _        | <del>                                     </del> | t                 | 1        | _                                      |              | -              | -              |              |              | 1 -  | 95                | -             |              | -            | -            |              |              | $\vdash$   |              | -            | -        |   | $\vdash$  | 145        |             | -          | H            |
|          | 46  |          |  | 1                 | 1        | _                                      |              | 1-             | <b></b> -      |              | -            | 1  | 96                |               |              | _            | _            |              | _            | _          | П            | П            |          |   | -         | 146        | -           | $\neg$     | r            |
|          | 47  |          |  |                   |          |  |              |                |                |              |              | ] [  | 97                |               |              |              |              |              |              |            |              |              |          |   | _         | 147        | 寸           | $\neg$     | Γ            |
|          | 48  | 4        |  | ]                 | <u> </u> |  |              |                |                |              |              |  | 98                |               | _            |              |              |              |              |            |              |              |          |   |           | 148        |             |            | Г            |
| Ш        | 49  |          | <u> </u> _                                       | <u> </u>          | <u> </u> |  | _            | <u> </u> _     |                |              | _            | _  | 99                | _             | <u> </u>     | _            | _            | L            | L            | Ш          | Ц            |              |          |   |           | 149        | $\Box$      |            | Ĺ            |
| Ш        | 50  | ـــــا   | <u></u>  | J                 | <b>!</b> | l                                      | l            | <b>I</b>       | Щ.             | L            | İ            | J L  | 100               | ட             | L            | L            | Ц.           | <u> </u>     | لـــا        | L          | ш            | $\Box$       | $\sqcup$ |   | Ш         | 150        | ᆚ           |            | L.           |

|          |            |   | <u> </u>     |          |          |          |          |              |          |          |          |  |  |  |  |  |
|----------|------------|---|--------------|----------|----------|----------|----------|--------------|----------|----------|----------|--|--|--|--|--|
| Cla      | im         |   | ,            |          |          | Da       | te       |              |          |          |          |  |  |  |  |  |
| Final    | Original   |   |              |          |          |          |          |              |          |          |          |  |  |  |  |  |
| _        | 101        | _ |              | $\vdash$ | <u> </u> | -        |          |              |          |          | Н        |  |  |  |  |  |
|          | 102        | _ |              |          |          |          |          | -            |          |          |          |  |  |  |  |  |
|          | 103        |   |              |          |          |          |          |              |          |          |          |  |  |  |  |  |
|          | 104        |   |              |          |          |          |          |              |          |          |          |  |  |  |  |  |
| _        | 105        | _ | _            | L        | L        | _        | _        | _            | _        |          | Щ        |  |  |  |  |  |
|          | 106<br>107 | _ | _            | _        | _        | _        |          | L            | L        | _        |          |  |  |  |  |  |
|          | 108        | - | H            | ⊢        | ├-       | -        | -        | -            | <u> </u> | _        | $\vdash$ |  |  |  |  |  |
|          | 109        |   | ┝╌           | -        |          |          | -        | -            | $\vdash$ | $\vdash$ |          |  |  |  |  |  |
| _        | 110        |   | -            | -        | $\vdash$ | _        | Н        | $\vdash$     | -        | -        | Н        |  |  |  |  |  |
| _        | 111        | _ | ┪            |          | $\vdash$ | _        |          | $\vdash$     | Г        | Н        |          |  |  |  |  |  |
|          | 112        |   |              |          |          | -        |          |              |          |          | П        |  |  |  |  |  |
|          | 113        |   |              |          |          |          |          |              |          |          |          |  |  |  |  |  |
|          | 114        |   |              |          |          |          |          |              |          |          |          |  |  |  |  |  |
|          | 115        | _ | _            |          | _        | _        |          | L            | _        |          | Ц        |  |  |  |  |  |
| _        | 116        |   | L            | L        | $\vdash$ | <u> </u> | _        | L            | _        |          | _ {      |  |  |  |  |  |
|          | 117<br>118 | _ | <u> </u>     |          | -        | _        | $\vdash$ | L            | H        | H        | -        |  |  |  |  |  |
| -        | 119        |   | -            |          | -        | _        |          | $\vdash$     | _        | $\vdash$ | Н        |  |  |  |  |  |
| -        | 120        | _ | <del> </del> | ┝        | H        |          | $\vdash$ | -            | -        | -        |          |  |  |  |  |  |
|          | 121        |   |              |          |          |          | -        |              | -        | -        | $\dashv$ |  |  |  |  |  |
|          | 122        |   | -            | -        | _        | -        | $\vdash$ | <del> </del> | -        | -        | -        |  |  |  |  |  |
|          | 123        | _ |              | ┢─       |          |          | -        |              |          |          |          |  |  |  |  |  |
|          | 124        | _ | -            |          | $\vdash$ | -        |          | ├-           |          | -        | -        |  |  |  |  |  |
|          | 125        |   |              | Г        | _        |          |          |              | _        |          |          |  |  |  |  |  |
|          | 126        |   |              |          |          |          |          |              |          |          |          |  |  |  |  |  |
|          | 127        |   |              |          |          |          |          |              |          |          |          |  |  |  |  |  |
| _        | 128        |   |              | <u> </u> | _        | _        | _        | _            | <u> </u> | _        |          |  |  |  |  |  |
|          | 129        |   | L            |          | <u> </u> | ļ        | <u> </u> | <u> </u>     |          |          |          |  |  |  |  |  |
|          | 130        |   |              | $\vdash$ | _        | ⊢        | -        | -            | ┡-       | <u> </u> | _        |  |  |  |  |  |
| _        | 131<br>132 |   |              |          |          |          |          |              |          |          |          |  |  |  |  |  |
|          | 133        |   |              | -        |          |          |          | -            |          |          |          |  |  |  |  |  |
|          | 134        |   |              |          |          |          | -        |              |          |          |          |  |  |  |  |  |
|          | 135        |   |              |          |          | -        |          |              | _        |          |          |  |  |  |  |  |
|          | 136        |   |              |          |          |          |          |              |          |          |          |  |  |  |  |  |
|          | 137        |   |              |          |          |          |          |              |          |          |          |  |  |  |  |  |
| _        | 138        |   | _            | L.       | L        | _        | <u></u>  | _            | L        | L        |          |  |  |  |  |  |
| _        | 139        | _ |              | _        | _        | _        | <u> </u> | _            | _        | _        |          |  |  |  |  |  |
| $\dashv$ | 140        |   |              |          |          |          |          | _            |          | L        | _        |  |  |  |  |  |
| 4        | 141<br>142 | _ |              | $\vdash$ | _        | <u> </u> | _        | -            | Ь.       | $\vdash$ | -        |  |  |  |  |  |
| $\dashv$ | 143        | _ | -            |          |          | -        | Н        | -            |          |          |          |  |  |  |  |  |
| -        | 144        |   |              |          |          |          |          |              |          |          |          |  |  |  |  |  |
|          | 145        |   | -            | Н        | -        | -        | -        | _            | -        | H        | Н        |  |  |  |  |  |
| $\dashv$ | 146        |   | Н            | -        |          | -        | Н        | $\vdash$     |          | -        | $\vdash$ |  |  |  |  |  |
|          | 147        | _ |              |          |          |          | Н        | _            | Т        | Н        | Н        |  |  |  |  |  |
|          | 148        |   |              |          |          |          | П        |              |          |          |          |  |  |  |  |  |
|          | 149        |   |              |          |          |          |          |              |          |          |          |  |  |  |  |  |
|          | 150        |   |              |          |          |          |          |              |          |          |          |  |  |  |  |  |

If more than 150 claims or 10 actions staple additional sheet here

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